Passive Microwave Remote Sensing: An Introduction to Research Work in HUST

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Abstract:

Passive microwave remote sensing provide measurements of sea surface temperature (SST), sea surface salinity (SSS), wind speed, water vapor, cloud liquid water, rain rate, and sea ice that have lead to significant advances in meteorological and oceanographic research. Researchers at Huazhong University of Science and Technology (HUST), China, have built a series passive microwave remote sensing instrumentations, including real aperture radiometer and synthetic aperture radiometer, to test in field application ranging from terrorist radiometric imaging to atmospheric remote sensing. In this talk, I will introduce the research work of HUST in microwave remote sensing area, including microwave/millimeter wave radiometer instrumentations, field experiment results, inversion algorithm, simulation software for remote sensing application, etc.

Biography:

Dr. Ke Chen is an associate professor in the Department of Electronics and Information Engineering at the Huazhong University of Science and Technology (HUST), China. Now he is also a visiting scholar in the Department of Electrical, Computer, and Energy Engineering at the University of Colorado at Boulder. He received his B.S., M.S., Ph.D. degrees in Electrical Engineer from Huazhong University of Science and Technology, China in 1999, 2002, and 2010, respectively. His current research interests are in passive remote sensing of atmospheric and oceanographic processes, radiative transfer and electromagnetic theory, parameters inversion algorithm data assimilation, microwave real aperture radiometer and synthetic aperture radiometer instrumentation, passive millimeter imaging, calibration and metrology. His current goal is to develop surface-based and spaceborne sensing systems for meteorology, hydrology, and climatology.

Light refreshments will be served.